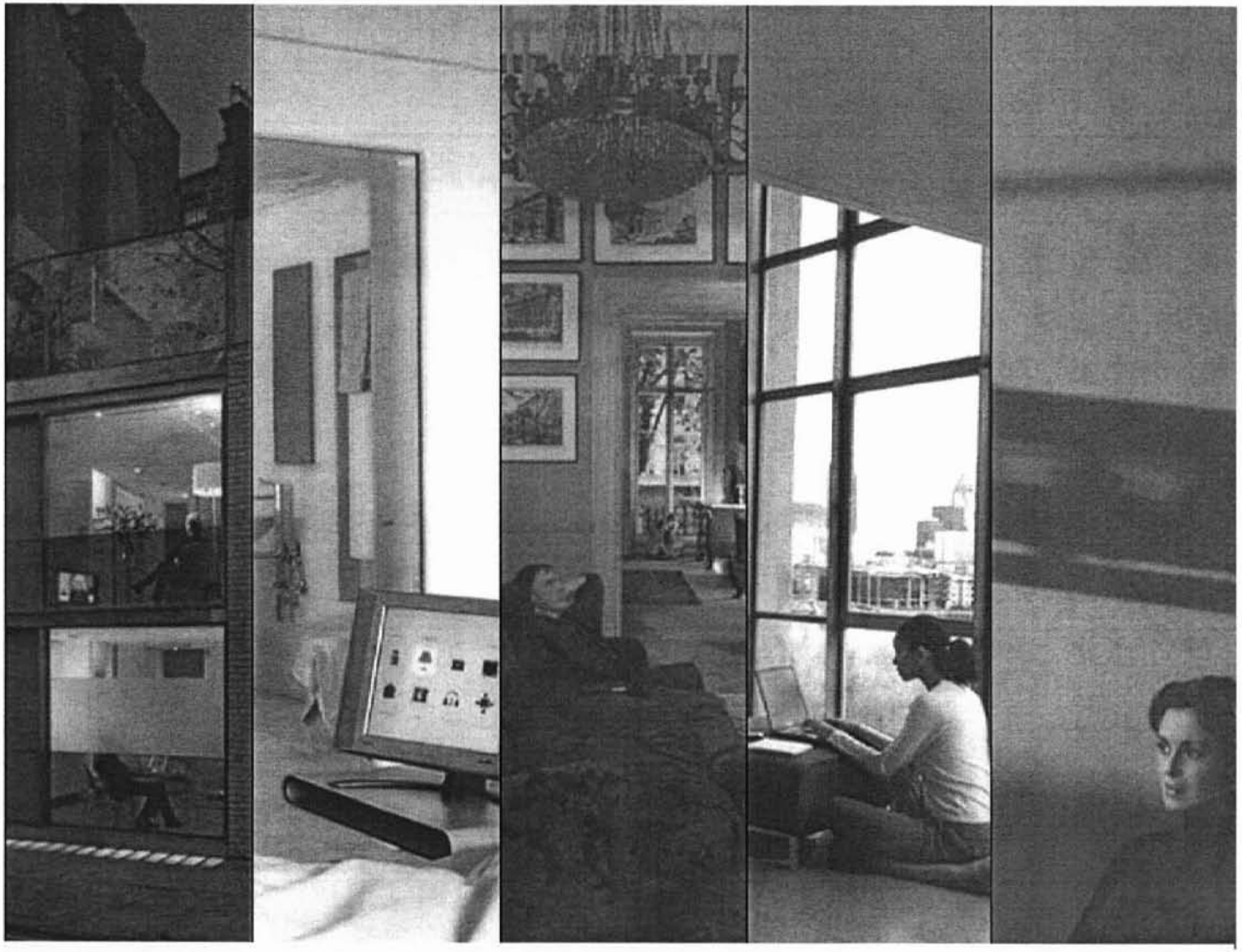
AFC

The Acronym *for* Access™



FCC, President, Congress taking the right steps toward Broadband policy

- **FCC action with regard to broadband in the TRO has produced compelling results**
  - Increased deployment of broadband services
  - Announcements of significant expected additional investments
- **Industry acquisitions reflect growing confidence in broadband access segment**
- **Consistent with President Bush and Congressional Democrats and Republicans, prompt availability of broadband services to all Americans is imperative**

Minor, but Important, Clarification to TRO Needed

- **BellSouth's Petition for Reconsideration highlighted some aspects of the TRO needing clarification**
  - i.e. equal treatment of FTTC with FTTH in greenfield applications
- **BellSouth, SBC, Verizon defined "Fiber-to-the-Premises", or FTTP, to include FTTH and FTTC**
- **Other industry groups, such as the Broadband High-Tech Coalition, also support equal treatment**

FTTC Should be Treated Identical to FTTH in Greenfield Situations

- **FTTC, FTTH and Fiber-to-the-MDU all support the same services (voice, video, data – 100Mb/s and beyond)**
- **Each incorporate some copper and coax**
- **Each satisfy competitive impairment standard**
- **"Bright Line" standard can be preserved – up to 500 feet of metallic media should be allowed between fiber termination and network demarc**
  - Same CPE and CPE interfaces for each loop type; same medium between CPE and fiber termination
  - Loop administration and inventory tools can readily identify loop types

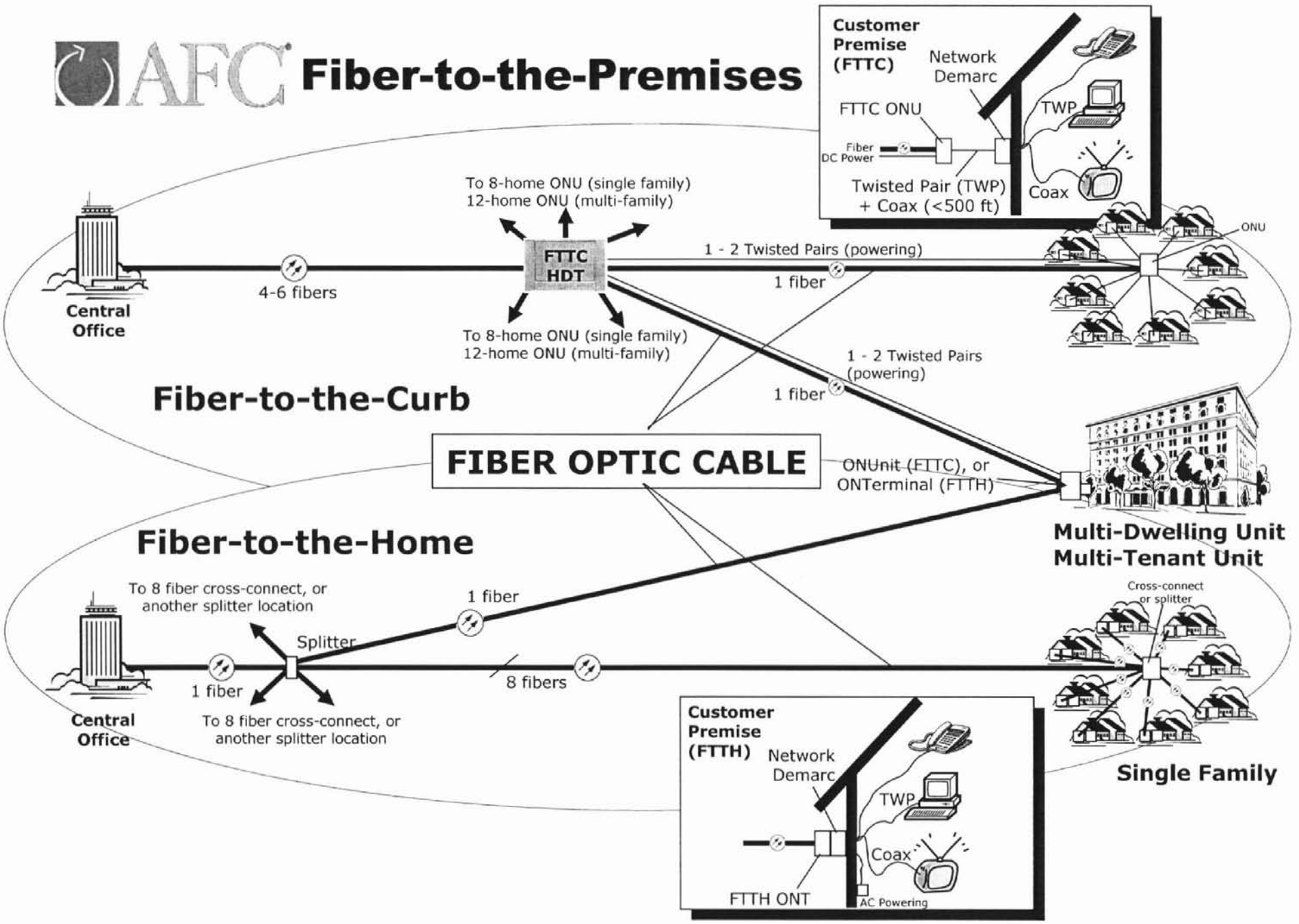
The Commission should remain technology neutral

- **Both FTTC and FTTH:**
  - Are service equivalent architectures
  - Comply with the section 706 goals
  - Meet the competitive impairment standard
- **The choice of architecture should be based on engineering and economic criteria**
  - Powering
  - Bandwidth Sharing
  - Electronic Points of Failure
- **Deployment decisions should not be based on arbitrary regulatory distinctions**

Network Engineering Differences (FTTC vs. FTTH)

- **Powering**
  - Network powering vs. home powering
  - Centralized battery backup vs. distributed batteries
  - Service provider ownership and management vs. customer owned and managed
- **Bandwidth Sharing**
  - One fiber shared by 8 - 12 homes vs. one fiber shared by 32 homes
- **Electronic Points of Failure**
  - O/E and powering conversion shared by 8-12 users vs. O/E, powering dedicated, and replicated, for every user

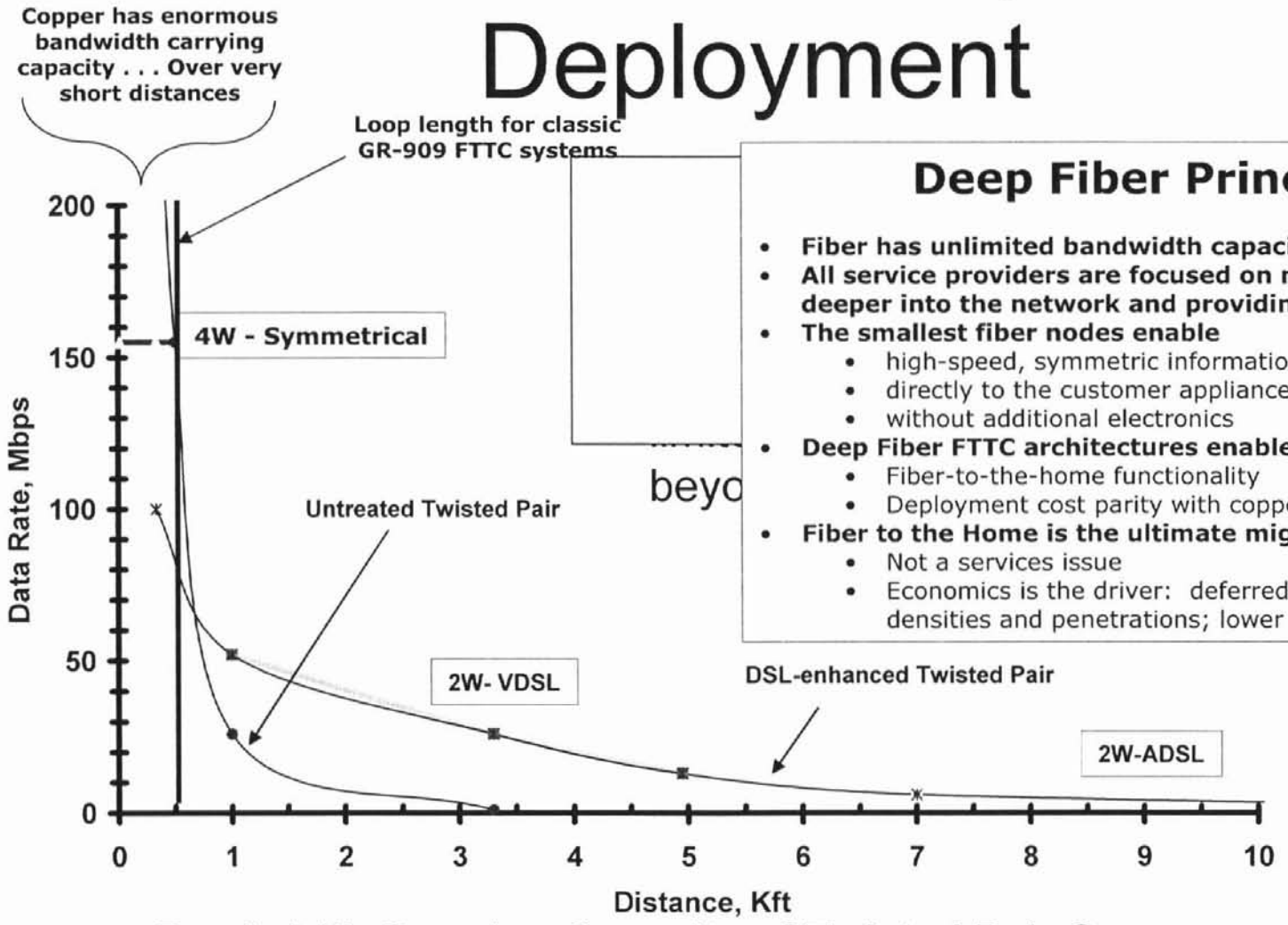
AFC Fiber-to-the-Premises



Summary

- **AFC has a broad product line allowing carriers to choose the best solution for the circumstances**
  - FTTH
  - FTTC
  - FTTBuilding
- **FTTH is economically and technically challenging in some situations . . . the same applications in which FTTC may be attractive**
- **Advanced services may not be deployed "to all Americans" based on disparate regulatory treatment of FTTC and FTTH**

The Value of Deep Fiber Deployment



Bandwidth Carrying Capacity of Twisted Pair Copper

Deep Fiber Principles

- **Fiber has unlimited bandwidth capacity**
- **All service providers are focused on migrating fiber deeper into the network and providing bundled services**
- **The smallest fiber nodes enable**
  - high-speed, symmetric information delivery
  - directly to the customer appliance
  - without additional electronics
- **Deep Fiber FTTC architectures enable:**
  - Fiber-to-the-home functionality
  - Deployment cost parity with copper
- **Fiber to the Home is the ultimate migration**
  - Not a services issue
  - Economics is the driver: deferred capex for lower densities and penetrations; lower OPEX